

CACTUS AND SUCCULENT JOURNAL

Of the Cactus And Succulent Society
Of America

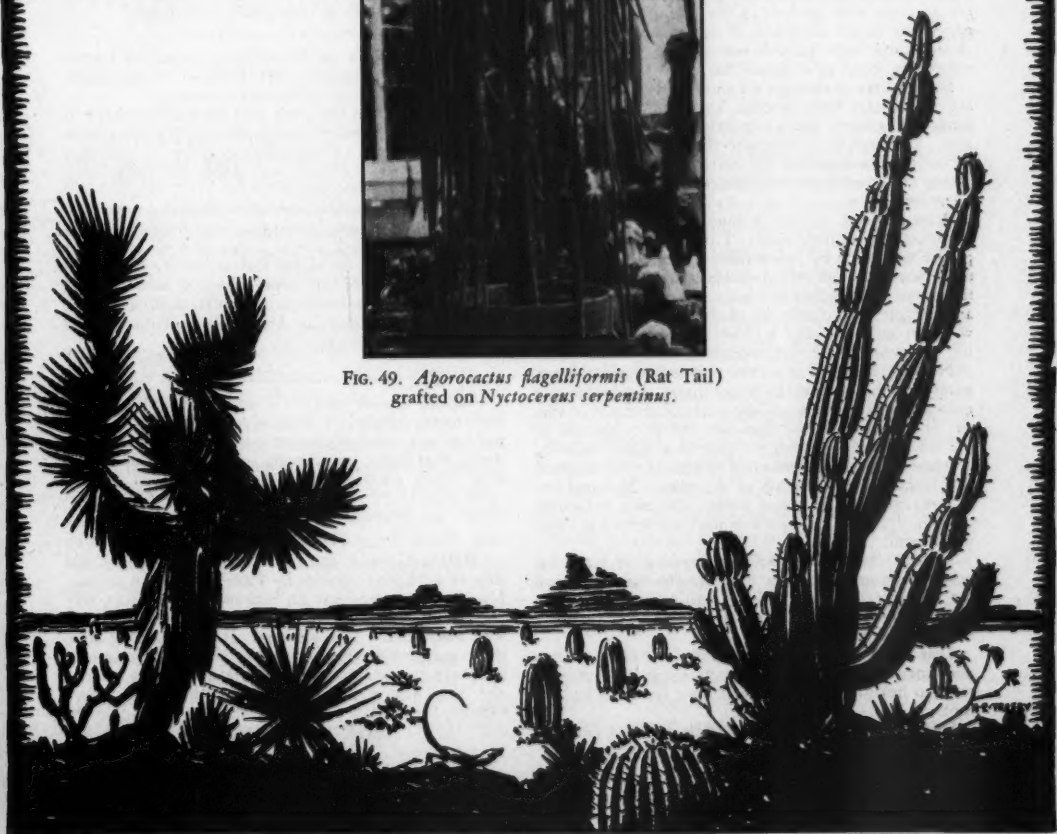
Vol. XVIII

JUNE, 1946

No. 6



FIG. 49. *Aporocactus flagelliformis* (Rat Tail)
grafted on *Nyctocereus serpentinus*.



CACTUS AND SUCCULENT JOURNAL

Published and Owned by the Cactus and Succulent Society of America, Inc., Box 101, Pasadena 16, California. A monthly magazine to promote the Society and devoted to Cacti and Succulents for the dissemination of knowledge and the recording of hitherto unpublished data in order that the culture and study of these particular plants may attain the popularity which is justly theirs. Subscription \$3.00 per year. Foreign \$3.00 per year by international money order. Membership in the Cactus Society free with subscription. Mail application to SCOTT HASELTON, Editor, Box 101, Pasadena 16, Calif. Editorial Staff: THE ENTIRE SOCIETY. Entered as Second Class Matter at Pasadena, Calif., under act of March 3, 1879.

Vol. XVIII

JUNE, 1946

No. 6

Hunting Succulents in the Canary Islands, Part II.....	E. Lamb 83
A New Subspecies of <i>Sedum ebracteatum</i> from the Sierra Madre del Sur.....	Robert T. Clausen 86
Cactus Pete's Hybrids.....	Cactus Pete 87
Notes on Haworthias.....	J. R. Brown 89
Cereusly Speaking.....	John E. C. Rodgers 90
Affiliate Notes.....	Chas. Place 91
Standard Forms for Descriptions.....	Scott E. Haselton 93
Spine Chats.....	Ladislaus Cutak 95

SAVING DAMAGED PLANTS

Talk given to K.I.O.

Cactus Club, March 16, 1946

by Emil Clark

As the season draws near when we can put our plants outdoors, this is an opportune time to closely inspect them. Plants in storage or in windows always show some form of damage because of the unnatural method of growing or the manner of storage.

Since ninety-five percent of the succulent plants begin to show new growth in the spring it gives us a good clew to the condition of our plants. Those that should show new growth but do not, warn us that something is not as it should be.

Some forms of damage we should learn to recognize are rot at the base, interior rot, loss of roots, soft immature growth and a condition I call mummification. The ability to recognize these forms of damage before they have gained too much headway will result in the saving of many valuable plants; there is a treatment for all.

Plant damage occurs in summer and winter from too much or too little water. I truly believe that most plants are killed by top watering. I say "killed" because such damage is not recognized in time to save the plant. We should strive for correct moisture. As an example, the condition of the soil in our garden when we cultivate after a shower, when the soil is not too dry, and yet not wet enough to stick to our tools.

Now for base rot: it may or may not be in evidence, plant usually appears in a debilitant condition, not growing, just existing. If the plant is of the type that sits on the ground and does not fall over because of the rot, shake the plant or give it a slight twisting pressure or test the bottom of the plant with a pencil and compare with the top of the plant. If found defective, cut away all rotted parts, clear back to healthy growth, dry out well for a few days and reroot in clean moist sand.

Interior rot: not so easily recognized, as plant appears to be growing in a most thrifty manner. Look for an unhealthy and moist condition just above the soil level. Cut away all rot and the plant may be saved if the rot has not reached the crown.

Loss of roots: plant looks healthy but remains in a dormant state when it should be growing. Cut off dead roots to healthy tissue, dry well for a few days and re-root.

Soft, immature growth: should be removed from all

cacti and succulents. New growth will be normal and healthy and your plant will be and look much better.

Mummification: I know of no better word to describe this condition. The plants have roots but a form of dry rot has set in and the nourishment can not pass to the plant. The result is a corky layer that must be entirely removed and the plant rerooted.

Thus we have covered the wet and dry rots that are the most common in our plants here. Inspect your plants every spring and try for correct moisture without top watering except for normal rains and you should be able to keep your pets a little longer.

I have noticed in the November issue of the Cactus and Succulent Journal that Mr. E. Shurly in his article states that I appear to grow my plants soft.

This is far from the truth, as I have always kept to a very low temperature during the winter and a glance at the photograph of my winning group of seedlings in the CACTUS JOURNAL will prove my point. My plants were far from soft.

I am sorry to say that owing to the war I have now no plants left. I am, however, going to start a fresh collection from seed which I managed to save from my own plants. I am afraid that some may be too old to germinate, but I am hoping for the best. I shall have more time to devote to my hobby now, as I have recently retired from the Metropolitan Police (London), after 26 years service.

A. BOARDER.

I would like to pass on a suggestion to others. I find it very helpful. Use an old time button-hook (if you are lucky enough to own one) to remove the little weeds that insist on growing up under the spines of your Barrel Cacti.

MRS. H. B. CENTER.

A NEW BOOKLET

"Button Gardens and How to Make Them" is the title of a 24-page booklet by Florence Waye Casebolt. Miniature arrangements on buttons are becoming very popular especially for the cactophile whose plants are well adapted for this purpose. It is surprising how these gardens survive and the small colorful cuttings are never missed from your collection. Order a booklet and then test your originality. Order from Abbey Garden Press, price 50c postpaid.

BOX 101, PASADENA



FIG. 50. On the road to Agaete the plants overhang the rock walls with a thousand foot drop below.

Hunting Succulents in the Canary Islands

By E. LAMB, F.R.H.S.

Part II

I have already mentioned I went prepared for collecting, and readers will, I expect, be wondering where I kept all these plants. At my H. Q. the management was most helpful, letting me store the collected plants in a room where I let them dry before packing, when I considered them ready. I spent many an evening, wrapping and packing plants into empty cabin trunks I had brought with me for this purpose. The servants who attended to my wants seemed to regard me as "funny" but otherwise harmless; they could not understand my interest in their "weeds" but as the "Mad Englishman" has to be humored we got along very well indeed. As day after day I returned with more plants they even seemed interested in watching me pack them up, anyhow no harm came to any of them while I was away on the island of Teneriffe, my room was just as I left it when I returned later (with many more additions).

La Caldera, the extinct volcano I have already mentioned, can be reached by footpath from just below Santa Brigida, this eventually brings one to the road near Telde. Anywhere around this part of Gran Canaria provides fairly easy hunting, the hills are not too hard to climb, the

scenery is good and one comes across all kinds of plants. During my wanderings I found the *Monanthes pallens* already mentioned, *Kleinia neriifolia*, *Euphorbia balsamifera* and *Euphorbia regis-jubae*. I found these as odd plants here and there, but none in colonies like *E. canariensis*. Several other *Monanthes* were found as odd plants, but the *Monanthes* I collected as true to name did not come from this part. Photographs show some fine flowering masses of *Opuntias*, the fruits of which I learned to eat with relish. I have since tried eating the *Opuntia* fruits ripened in England from some of the specimens I brought back, but the flavor does not compare with those in their better climate.

I was now getting to know my way around and wished to explore new ground, the higher mountains lying towards the center of the island seemed likely to offer opportunity for collecting some of the *Aeoniums*. When I inquired about this part I was assured no plants grew there, I should be wasting my time, etc. This, of course, decided it, I promptly made up my mind to go there, for I had by now realized that wherever I was recommended to go, I found little of interest, whereas to do just the opposite



FIG. 51. Slopes above Tafira where *Kleinia neriifolia*, *Monanthes pallens* and *Euphorbia regis-jubae* were found.

was mostly very successful. I came to regard these people's opinions as my guide, always, of course, reversing their suggestions. Obviously their ideas of plants were opposite to mine, in their eyes the plants I sought were weeds.

After studying a relief map of the island I decided to get to Valsequillo, trek over the mountains in general direction of the highest peak, which is, I think, about 6,000 feet high. There are a few higher points further south but I wanted to reach the road before dark and therefore kept in mind San Mateo.

I reached Valsequillo quite early in the morning, the sun was hot, but in the shadow of these high peaks it was almost dark. After inquiring the footpath which led towards San Mateo, I started climbing and collecting. This particular day will always be remembered for I found such a lot to interest me. *Aeonium tabulaeforme* plastered the high rocks overhanging my narrow path, their size often as much as 18 inches and possibly more. I collected some of convenient size. *Aeonium undulatum* I found on this trip. The path led into a mass of hills. All sense of direction being lost, I had constantly to look at my pocket compass. I climbed higher and higher, each time thinking to reach the top from where I could check my position, but as I climbed on another peak appeared.

Greenovia aurea was found in quantity, and of course, collected—all I needed, in a matter of a few minutes. Other *Aeoniums* which I was uncertain to name, grew in big bushes; often I used their stems to pull myself upwards. I al-

ways kept the footpath or goat track in view, knowing that it would lead somewhere.

I do not know to what height I climbed but as my direction changed every few minutes I must have got well into the hills over 5,000 feet high. Having rested, eaten my lunch and decided I'd better move a bit faster, I kept on or near the path which continued to wind first this way, then that. I managed to pick up a few small plants which turned out to be *Euphorbia atropurpurea*. Up to now I had not seen anyone; everything was dead silent.

I was now ringed in by mountains, the path-way running along a narrow valley, when to my surprise the path forked. The question was which one to take. I had decided that the one to the left would probably lead into the completely uninhabited part, when a voice came echoing across the valley. Looking carefully I finally saw the figure of a peasant. He appeared to live there and I concluded he had a cave. Calling back the name of San Mateo, at the same time taking the right hand path, I gathered by his signs that I was on the right road. About 30 minutes later the peasant was waiting for me and insisted on conducting me to San Mateo. This took about two hours. He helped me around places, where to look down, gave me the shivers. It was apparent he was used to this, and although he wore no shoes he was more agile than I. He finally waved his arms to indicate that San Mateo was just below us. I could not get him to accept anything for his services. He stood and watched me on my way down and thus we parted. It was dark as I picked up a wawa for Las Palmas, after a successful though tiring day.

I often covered, or partly covered, old ground, finding odd plants here and there. I went to Tenoya and wandered on from there, keeping to the roadway which runs along one side of a deep valley, crosses this at the foot, and then runs back up the other side. The mountains here rise almost vertically. There are cuttings made by water from the hills at intervals, up which a bit of climbing can be done. Some of these paths see little sun, others are quite arid, but I found nothing startling here, as by now I had come to regard *Aeoniums*, etc., as normal things to see. It was, of course, interesting to note the different forms of growth of the same plant, due to shade or full sun. For that reason I could not be sure of some I collected until I got home.

Aeoniums grow in great profusion around Tenteniguada, Firgas, Moya, etc. I did not go quite to Moya but wandered about, somewhere near that place. I believe the road ends here like so many other places inland. Up to now I had not found *Ceropegia fusca*. This I was very

anxious to do and always kept an eye open for it wherever I went. I spent two days along the east coast looking, but somehow did not find it.

Teneriffe being on my list to visit, and Christmas only a few days off, I packed up my remaining plants, left my room ready for my return in early January, and made inquiries about crossing to Teneriffe. This was uneventful, except perhaps that I was the only Englishman. The boat was a brand new Spanish vessel of super design.

During a climb of this kind succulents are found well up the slopes, but as they appeared to be thinning out, I did not go higher. Needless to say I collected oddments from different parts, but only because of some special interest in color, shape, etc. Most of these were *Aeoniums*. I spent a few hours in the Botanical Gardens at Orotava where some fine imported cacti were growing, obviously the climate agreed with them, as well as the plants native to the island.



Fig. 52. Collecting *Monanthes pallens* from rocks near Tafira.

It boasted red plush and gold paint everywhere, and had a squat funnel, flood-lighted. The crew seemed very proud of it. The crossing was fast, being made in just under four hours. My arrival at Teneriffe was around midnight, so I was glad to get to bed, having been collecting on Grand Canary since early that morning.

One of my first trips on Teneriffe was to visit Dr. O. Burchard at his home overlooking Orotava. A very fine spot he has, with perfect climate and wonderful scenery. I really envied the conditions he could grow under—no glasshouse, just his garden, where he showed me seedlings of *Euphorbia bandiensis* growing among the rockery. I need hardly say that he had some fine plants of nearly all the native succulents. My visit with him was a great pleasure.

The highest point on Teneriffe rises to over 12,000 feet, and Dr. Burchard's house is really on the slopes of this giant mountain high above Orotava itself, which is nearer the sea. I climbed up to Aguamansa, or somewhere near that place. It was hard going but the view was wonderful.

A relief map of Teneriffe suggested the southern part of this island a likely place for the so far, elusive *Ceropegias*, and I planned an all-out effort for this alone. The climate south or south-east is tropical and dry, high mountains rising almost from the sea to great heights inland. Roads run from Santa Cruz along this coast and also along the northern coast, the latter being not so hot, more trees and shrubs being seen.

The whole of the south-eastern part of Teneriffe is arid, the road to the south being long. Extra mileage is added by the many bends of hairpin variety. Such was my determination to hunt along this coast, that I hired a car and a driver, to cover as much as possible in one day. Many of you will know the meaning of the foreign type of fast driver. Driven for many years myself, I soon wondered if I would have been wiser to walk, but although my hair stood on end several times when rounding sharp bends, he drove well and was ready to oblige whenever I wanted to explore off the road.

To be continued

A New Sub-species of *Sedum ebracteatum* from the Sierra Madre del Sur

By ROBERT T. CLAUSEN

On November 30, 1939, G. B. Hinton botanized near Chilacayote in the District of Mina, State of Guerrero, Mexico. On the barranca, overhanging a stream, he found and collected a white-flowered *Sedum* of the section *Sedastrum*. This was subsequently distributed under his No. 14933 as *Sedum ebracteatum*. Compared with *S. ebracteatum* from the Mexican highland to the north, the specimens from Guerrero are remarkable for the large size of their leaves, the more abundant pubescence and the very large suborbicular floral bracts.

In a paper on the section *Sedastrum* (Bull. Torrey Club 70:28-296, 1943), I indicated that the differences between several of the so-called species are relatively slight. This is perfectly evident from my key. Specimens like those collected by Hinton in Guerrero are as different from previously described species as are some of these from each other. Hinton's plants do not exactly match any of the known species, yet the number of characteristics by which his plants differ from other species is not great. When the flora of the central Mexican highlands and the Sierra Madre del Sur is better understood, a correct taxonomic interpretation of these plants will be easier than at present. The problem now is to decide whether to describe Hinton's collection as a distinct species or to enlarge the concept of one of the previously described species to include the new material. I prefer the latter course in the belief that the facts at hand suggest that additional data will more likely favor this disposition than the reverse. Hinton's collection comes from an area of the Sierra Madre del Sur from which no species of the section *Sedastrum* has previously been recorded. Although the distance from the nearest locality where *S. ebracteatum* is known to occur is only 250 km., the climate is quite different. The larger leaves and floral bracts might be manifestations of different environmental conditions, though they probably also have genetical basis. If Hinton's plants simply are a regional offshoot of the population which is frequent in the mountains of the central Mexican highlands, intermediates may eventually be found to fill in the gaps between the two extreme conditions. Since this may be possible and despite the lack of knowledge of such intermediates today, I pro-

pose Hinton's collection as basis for the designation of a new subspecies of *S. ebracteatum*. The accompanying drawings are made of the type specimen.

Sedum ebracteatum A. DC. subsp. **grandifolium** R. T. Clausen, subsp. nov., foliis caulis floriferi magnis, 2.5-10.5 cm. longis; caulibus, pediculis et foliis pubescentibus cum trichomis albis et raro furcatis; bracteis floreis suborbicularibus, magnis, 5-15 mm. longis et 3-11 mm.

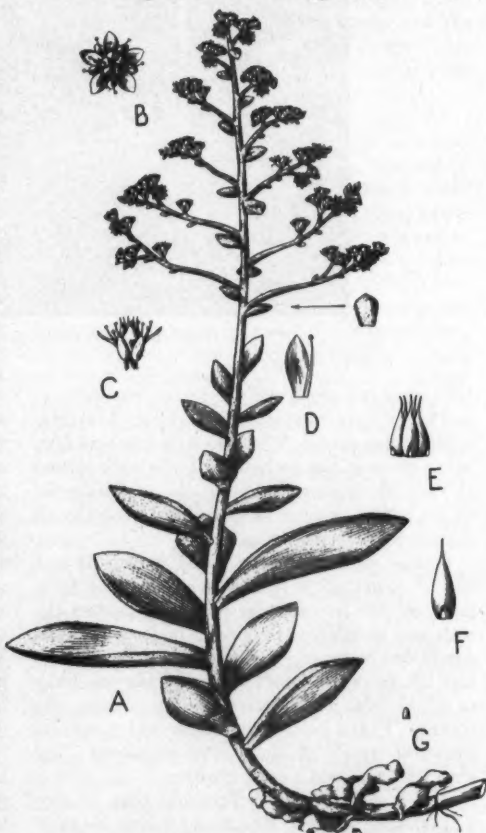


FIG. 53. *Sedum ebracteatum* subsp. *grandifolium*. A. Habit sketch (x0.3). B. Flower from above (x1.3). C. Flower from side (x1.3). D. Petal and two stamens (x2). E. Pistils (x2). F. Single pistil (x2.7). G. Nectar-scale (x3.3). Drawings by Miss E. M. Abbe, prepared from type collection.

latis. Typus est collectio G. B. Hinton, n. 14933, in herbario Cornell University, Ithaca, N. Y., ex Chilacayote, 100° 42' W., 17° 45' N., Distr. Mina, Guerrero, Mexico, alt. 1500 m.

Since publication of my paper on *Sedastrum*, mentioned above, further study has indicated that *S. incertum* and *S. chapalense* are synonyms of *S. ebracteatum*. If this conclusion is not correct, it will be necessary to discover better means than I have found for separating either of these species from the nomenclaturally typical *S. ebracteatum*. To express the situation as I now understand it, the following subspecific name is necessary:

Sedum ebracteatum DC. subsp. *typicum* R. T. Clausen, subsp. nov., based on *S. ebracteatum* DC., Mém. sur la Fam. des Crassulacées, p. 37, pl. 6, fig. B, 1828. The synonymy includes all names previously cited by me (Bull. Torr. Club 70:290) as synonyms of *S. ebracteatum* as well as *S. incertum* Hemsley, Diag. Pl. Nov. 1:11

(1878) and *S. chapalense* S. Watson, Proc. Am. Acad. 22:411 (1877), together with their synonyms.

Key to the subspecies of *Sedum ebracteatum*

- A. Leaves of floral stems 0.4-5 cm. long; oblong, oblong-lanceolate or ovate, glabrous or puberulent B

S. ebracteatum subsp. *typicum*

- AA. Leaves of floral stems 2.5-10.5 cm. long, mostly elliptic-oblong prominently ciliate and pubescent with white trichomes which are sometimes branched..... *S. ebracteatum* subsp. *grandifolium*

For assistance in determining the exact location of Chilacayote, I am grateful to Dr. H. W. Rickett, Bibliographer at the New York Botanical Garden and to Mr. James Hinton. Also I am indebted to the Faculty-Trustee Committee on Research of Cornell University for aid in carrying on my research on *Sedum*.

Department of Botany
Cornell University

—CACTUS PETE'S HYBRIDS TO 1946—

The following list is a check-list of names given to the originations of Orchid Cacti by Cactus Pete. The dates are for the year that they were first sold to the

public. If anyone has precedence to any of these names, please send date, place of publication, and the originator of the name to Cactus Pete, 5440 Valley Blvd., Los Angeles 32, Calif.

Agate, 1942
Alice Sergeant, 1943
American Beauty, 1942
Amethyst, 1944
Argent, 1945
Avalon, 1945
Babette, 1943
Baby, 1945
Ballet, 1943
Barbara Frietchie, 1945
Black Knight, 1944
Black Monarch, 1944
Blondie, 1945
Bonanza, 1942
Bronze Imp, 1945
Brownie, 1943
Buttercup, 1942
Cairo, 1942
Caruso, 1943
Cecile, 1942
Claudette, 1943
Cream Perfection, 1939
Crystal Cup, 1943
Crystal Queen, 1945
Cupid, 1941
Cutie, 1945
Dark Victory, 1941
Delhi, 1945
Delight, 1941
Desert Gold, 1945
Dorothy Dallas, 1945
Dona, 1942
Dusky Maiden, 1939
Ecstasy, 1944
Edah, 1943
Eve, 1944
Fairy Princess, 1945
Fantasia, 1945

Fawn, 1945
Flash, 1945
Fluff, 1945
Francine, 1939
Gertrude Hay, 1943
Glory, 1938
Gold Dust, 1941
Golden, 1939
Golden Dawn, 1944
Golden Lotus, 1941
Gold Myst, 1941
Gold Star, 1944
Gremlin, 1945
Hermes, 1939
Honey Child, 1945
Indian Maid, 1944
Indian Moon, 1945
Inferno, 1940
Jean Arthur, 1945
Jewel, 1944
Jinks, 1942
Jinx Falkenburg, 1945
Jubilant, 1945
June Night, 1943
Junga, 1945
Kathryn Lynn, 1943
King Midas, 1939
Lavender and Lace, 1943
Leo, 1941
London Fog, 1943
Los Angeles, 1939
Lucite, 1945
Lyra, 1945
Madam Chiang Kai-shek, 1942
Madam Pele, 1941
Mars, 1940
Maytime, 1940
Merle, 1943
Meteor, 1945

Minuet, 1945
Mirage, 1943
Moon Goddess, 1945
Moscow, 1945
Muchacho, 1942
North Star, 1943
Padua, 1944
Patriot, 1945
Pete's 4x, 1938
Pete's Pet, 1945
Petite, 1940
Polar Star, 1945
Pretty Lady, 1945
Queen o' the Mists, 1943
Rainbow Trail, 1945
Rebellion, 1945
Sahara, 1943
Sally Moore, 1943
San Antonio, 1945
Seefus, 1939
Sensation, 1940
Shadow, 1945
Shalimar, 1945
Silver Moon, 1940
Silver Star, 1943
Snow Drop, 1944
Snow Queen, 1942
Star Lite, 1945
Stars and Stripes, 1939
Sun Ray, 1940
Supreme, 1941
Tarawa, 1943
Token, 1945
Treasure, 1944
Triumph, 1940
Vesuvius, 1940
Victory, 1943
Warrior, 1945
Winter Marigold, 1944



FIG. 54. Ella Nipper of Chester, Illinois, and her collection arranged for the summer.



FIG. 55. During the winter the collection is placed in the sunniest windows of the living room.

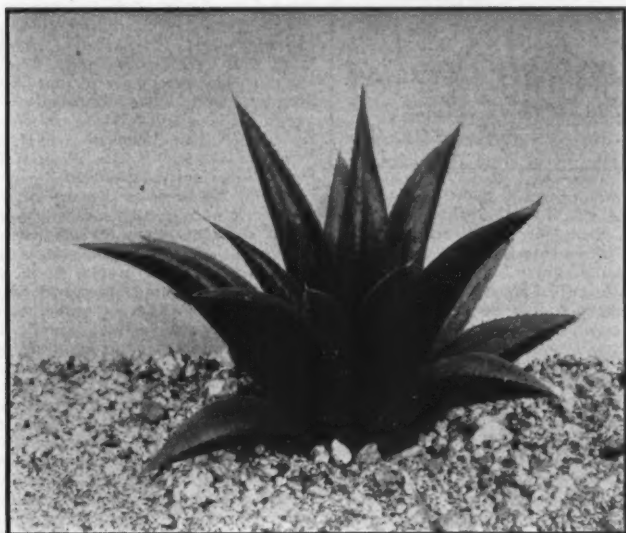


FIG. 56. *Haworthia nitidula* Poelln. nat. size.

Notes on Haworthias

By J. R. BROWN

Haworthia nitidula Poelln. in Desert Plt. Life XI (1939) 192.

Plant stemless, simple or rarely proliferous from the base, 6-8 cm. in diam.

Leaves ovate-lanceolate, acuminate, erect-spreading, 4-6 cm. long, 8-10 mm. wide, light green, the retuse leaf faces somewhat pellucid, slightly shining, lightly convex, about 2.5 cm. long, long acuminate, smooth and with 6-8 darker lengthwise lines, of which only the middle line extends to, or almost to, the tip, back of leaf rounded and somewhat obliquely keeled, smooth, with a few lighter flecks towards the tip, margins and keels with short teeth about

0.5 mm. in length, and with a 4-6 mm. end bristle, which is simple or with very minute teeth at the base.

Locality: Cape Colony, without exact type locality, but found in the vicinity of Worcester, Swellendam, Caledon, Bredasdorp.

While the name *nitidula* means only slightly shining and refers to the pellucid leaf faces, in cultivation the leaf faces are quite pellucid and shining. The teeth on the keels and leaf margins also tend to become shorter in cultivation and scarcely exceed a length of $\frac{1}{2}$ mm.

An interesting little *Haworthia* belonging in the sect. *Retusae* Haw.

FROM NEW JERSEY

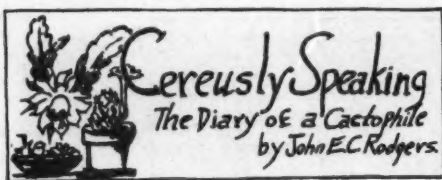
The sentence on page 50 of the JOURNAL concerning a 24-joint plant of *Opuntia basilaris* with 263 flowers prompts this letter.

Two weeks ago I was at Miami, Florida, and while there I saw a large specimen of *Opuntia Dillenii*. One joint of this cactus contained two or three fruits from each areole around the rim of the joint, and from each of these fruits sprang one or two more fruits of more recent date. None of the fruits contained seeds. On this particular joint there were 39 fruits, counted thrice for absolute accuracy. The other joints of the cactus were also heavily loaded with fruit and flower buds, though not so spectacularly as the one I ex-

amined. I would estimate there were an average of about 20 fruits or flower buds on each of the joints bearing fruits or buds.

EDWIN F. WIEGAND.

The graft shown on the cover was made by Mr. A. C. Boysen of Glenside, Pennsylvania. This is one of several plants and when they are in bloom they are gorgeous. Mrs. Boysen says, "We had as many as 500 flowers on one plant during late March and April. The florists like to display them because they attract such crowds; one florist said that no other window display ever proved to be such an attraction."



June 1. Checked all of my "non-bloom-covered" Aloes before I set them out for the summer. Paid attention that none of the base leaves touched the soil to invite rot. Layer of gravel under plant is good protection. Last killing frost danger is over. Use G. W. Reynold's four classifications on pages 151-152 of "Succulents for the Amateur"—soft-leaved, stemless, procumbent, and erect. I have some of each. My favorites are *A. aristata*, *A. variegata*, *A. longistyla*, and *A. striata*.

June 3. Read with interest J. R. Brown's article in April, 1946, JOURNAL, page 50, about *Aloe Bainesii*. The picture of a young plant put the soft-pedal on my aspirations unless I build a cupola immediately on the greenhouse. A tree Aloe—"there just ain't no such animal." Notes from last year show Aloes thrived in rocky with northwest by west exposure. Soil was humus, sand, and loam, which dries quickly after rains. Thick fleshy roots search out the richness to build excellent health. Hybrids between *A. longistyla* and *A. Ausana* (*A. variegata* var. *Ausana*) growing, one inch high. So far they are too small to tell which parent they most resemble. Seed pod green one day and dried green looking the next. Almost made me believe seed would be infertile but all 15 came up.

June 5. Checked edges of pots to see if "stolons" of *A. grandidentata*, *A. variegata*, *A. vera*-hybrid, and *A. saponaria* had started to come to the surface. Have been generous with these in the past, but now I'm allowing them to develop. Plant blooms better when the offsets are left on. I like these spotted beauties. They prefer partial shade. Too much sun causes the leaves to die back on *A. grandidentata* and *A. saponaria*.

June 8. Admired the old-rose pink transparent edge of *A. striata*. Needs plenty of water to keep it from "stalking." Becomes procumbent when not tied up securely. Never have liked the "lamppost-leanings" of Reynolds "Group 4." Not at all attractive on my shelf to see the "affectionate attitude." Visitors invariably try to trace the lopping stalks. "Stake them and save time," is my motto, but I don't always do it.

June 11. Took off some of the dried leaves from the three *A. aristata* plants I have. One stays partially closed no matter what the weather. A dark green one stays open. Expected mine to develop two heads after it bloomed. Eugene Ziegler, Spencerport, N. Y. cactophile, had one a few years back with three double headed sections. Mine hasn't. Just keeps on growing. Fresh looking leaves, warty; resembles *Haworthia setata*. Leaves all end in long hair-like point, and are covered with thorny spines on upper and lower sides. Thorny teeth at edges. Flowers red, striped with green.

June 15. Watered *Aloe microstigma*, *arborescens*, *Marlothii*, *langistyla*, in greenhouse. "Bloom" on leaves protected from rainy weather. Much prettier, with xerophytic touch. Decided last year I'd put them outdoors. I did. They grew and thrived but lost that look the succulent collector "raves" about, so they're indoors again. I'm happy. I recommend *Aloe minima*

and *A. longistyla* to the window gardener. They're both small, compact, cluster-forming beauties which bloom in early winter. They last, too, liking medium pots of rich well-drained loam with some powdered clay. Water Aloes every three to four days liberally during summer, once a week during winter if cool house (which I keep 45° to 55° night temperature).

June 19. Got a letter from T. H. Dawson and Gill, Cactus Nursery, Bendigo, Victoria, Australia, offering me a four foot *Aloe plicatilis*. Saw my write up in Cereusly Speaking of August 27, 1945, about said plant. We cactophiles are all "brothers under the skin" and I thank you for your offer. I shall attempt to get a U. S. Department of Agriculture permit and send for the plant. Would like to accept your invitation to visit your delightful continent and see your specimen plants. Lorain soldier says outside of the good old U. S. A. he likes Australia best. It he didn't get a job he intended to return to Melbourne. That's recommendation enough for me, too.

June 22. *Aloe spinosissima*—that "super-spiny *Aloe arborescens* type" growing. Has plenty of "teeth" under the leaves as well as some on top. Mine has never bloomed. Offset from Dr. James F. Machwart, Parma, Ohio, doctor cactophile. His multi-headed specimen blooms annually. Books usually show it as a rosette but it offsets readily from the base of a short stem. "Bloom" on leaves keeps it a greenhouse plant during the rainy season here. Woody trunk on two foot *Aloe arborescens* brown with up and down, rounded bark troughs. Has eight branches, one foot above the base of trunk. Likes plenty of water during both summer and winter. Offsets freely, too.

June 26. Checked 2½ inch rose pots sunk into soil of larger potted Aloes. Kept filled with water which soaks out slowly among roots of plants. Keeps soil moist but not wet. Works. Plants do not dry back at lower leaf ends. More moisture at right place also helps to prevent tips from dying back. Same method used for Euphorbias, columnar cacti, Apocacti, Rhipsalis, etc.

June 30. Set *Aloe brevifolia*, *ferox* and *pretoriensis* in rock garden in full sun. Felt the "harlequin shade" of the grape arbor was becoming too dense for this sun-loving section of Aloes. *A. brevifolia* has thick succulent leaves with teeth along the edges. Makes it no "tender-to-the-mouth" tidbit for any herbivorous animal. *Aloe mitriformis* with variety *xanthacarpa* are beautiful. *Xanthacarpa* has yellow teeth over the edges and under sides of leaves. A beauty. *A. ferox* has red teeth under and some above. Grows rapidly when given good soil. Is one of my favorites as it can be left out more in the open. *A. Africana* has sharp teeth much like *ferox*, probably a variety of the latter. Sold here from western shipments received by florists. Grows fine. *A. Marlothii*, with "flattened-spoon shaped spatulate" leaves, is a beauty but hard to get at present.

NOTE: I like Aloes. But I like them best when they're away from traffc. I do not recommend them to nervous housewives or mothers with small, "let-me-touch-it" hands. They're best grown surrounded by other plants even at the expense of good summer care. Selah!

WHAT KINDA CACTUS IZZAT? by Reg Manning, famous cartoonist of the Southwest. This 100 page book is packed with humorous cactus drawings which are based on hundreds of interesting facts. For amusement and information, this book is unique. Ideal as a gift book for those who hate or enjoy cacti. Cloth bound \$1.30 postpaid.

AFFILIATE NOTES

Please send your Affiliate Notes to Chas. Place, 5048 Hook Tree Rd., Rt. 1, Box 388 T, La Cañada, Calif.

I received Vol. 1, No. 2, of the Bulletin of the Detroit Cactus and Succulent Society too late to include in the May "Notes;" it is mainly a report on their latest Cactus Show. The show was comprised of some 450 plants, arranged in a realistic desert scene and was awarded a citation by the Michigan Horticultural Society. Mrs. Annie Labadie carried off top honors by being awarded the greatest number of prizes, receiving 2 firsts, 2 seconds, and 2 thirds.

Miss Wava Frye (Sec.) writes:

"The Detroit Society is mighty proud of her achievement. From March 30 to April 7, the Michigan Horticultural Society held the Flower Show at Convention Hall. A host or hostess was on duty at all times to answer questions and interest the public in our hobby. The exclamations of delight and contact with growers of plant life were well worth the hard work. Nineteen members were added to the membership, which now numbers 71. We are now issuing a monthly bulletin called "The Spinal Column." I would be pleased to exchange bulletins with any of the affiliates. Address 8747 Colfax, Detroit 4, Michigan. Our program for this year as outlined by our program chairman, Richard Kolasinski, will include study of Aloes, Opuntias. When is a Cactus not a Cactus, Hylocereanae, Variations in spines, Cereanae, Cristate and monstrose forms of cacti, Echinocereanae, and Echinocactanae."

A wonderfully fine show, well organized and carried out.

C. L. Wiese (Pub. Chairman) writes:

"The Cactus and Succulent Society of Oklahoma, on April 23, enjoyed a very scientific treatise given by Jay E. Gilkey on Compost, and how to maintain a supply of humus. You can always look to Oklahoma for the unusual, Chas. Polaski unwrapped a genuine elephant bell from India, handed it to our President, Loys Lankford, to call the club to order. It worked. A lively auction of plants boosted our treasury. One of the plants was a "Ricky," coxcomb crest from Lewis W. Sweet at Mangum, Oklahoma. Mr. Sweet has a fancy exhibit of these in his yard grafted on *Opuntia pads*."

Somewhat unusual, a "rickey," without gin.

Mrs. Ethel Rush (Pub. Chairman) writes:

"The Los Angeles Cactus and Succulent Society met Sunday, May 5, in the Cactus Garden of the Henry E. Huntington Library and Art Gallery, San Marino, Calif. For those who have never been there, the lovely grounds consist of 201 acres and the Cactus Garden covers 15 acres. Every tree, shrub, plant, carries a name plate or number. The cactus garden contains 2500 species of cacti and other succulents. One section of the garden was given over to cacti exclusively, the material from which data were taken for the preparation of the *Cactaceae* by Britton and Rose. Among these plants were *Coryocactus brevistylus*, one of the rarest, with very long spines, *Browningia candelaris*, *Browningia microsperma* and *Opuntia pachypus*. The Euphorbias were all in bloom. One plant of *E. coerulescens* Haw. covered a space fully 15 feet in diameter and was 5 feet tall. A plant of *Epiphyllum Ackermannii* grew over a spot about 6 feet in diameter and part way up a palm tree was covered with large buds and many flowers. *Eriocereus Bonplandii* grew up a tree for 25 ft. One of the many *Echinocactus Griseonii* made a clump 5 ft. across and had nearly 100 babies growing around it. *Malocarpus* was in bloom. *Pachycereus pectin-aboriginum* (Indian

comb) had 12 flowers. *Gymnocalycium saglionae* as large as a dinner plate had 12 pink flowers open. The Mammillarias grew in great mounds, many of them being as much as 3 ft. in diameter, and were all in full bloom. *Rhipsalis* hung in pots from three limbs. Wilcoxias grew in the open garden. All kinds of yuccas were in bloom. One of the many clumps of *Pachycereus marginatus* was all of 35 ft. tall with many stems bearing lots of fruit near the top. Among the plants of *Cereus peruvianus monstrosus* was one that was 25 ft. tall and 20 ft. wide. A plant of *Cereus xanthocarpus* was 25 ft. tall and 20 ft. wide with stems at least 1 ft. in diameter; it had an iron pipe fence 12 ft. tall for support. Agaves were everywhere and the stalks coming up for bloom looked for all the world like overgrown asparagus tips. The Aloes were in bloom everywhere. A garden 10 ft. wide and about 500 ft. long following a walk, was filled with *Aloe striata* and was quite a sight. *Pachycereus ruficeps* had a crown of dark red buds. *P. chrysomallus* had bloomed the night before and the closed flowers looked like brown woolly nests; these plants were about 18 ft. tall with flowers at the top. *Yucca tricona* from the Canary Islands, was 30 ft. tall and had about 30 heads causing it to look something like a palm tree. An Agave in the Antillinea group was in full bloom; a long yellow spike formed the inflorescence and I noticed many birds were working at the flower stalk for insects. Among the other succulents were large beds of *Pachyverias*, *Kleinias*, *Echeverias*, *Sedums*, *Cotyledons* and *Crassulas*. As must always happen, the day was all too short and the Garden closed with many plants left unseen."

Whenever possible, all cactus lovers should visit this Garden.

Mrs. Martha Maxwell (Pub. Chairman) writes:

"The Epiphyllum Society of America and the Southern California Cactus Exchange held their Spring Garden Tour, Sunday, May 19, 1946. Although the day was a bit cool with no sun, everyone seemed to enjoy the trip. All of our old and faithful members turned out in full strength, and many new faces appeared all happy to see the "Epis," in their full beauty. The day started early, at the home of our Vice-President, Mrs. Russell Hubbard, where we enjoyed a very lovely display of cacti and succulents in a most novel and artistically executed rock garden. From the hill-top lathouse overlooking Silver Lake we saw several very fine plants of hybrid Epiphyllums in bloom and the "lawn" in the front of the house was a solid mass of small yellow Opuntias. The Tour continued to the gardens of Mr. and Mrs. Marshall Neal in South Pasadena. Many of the early California events took place in this same garden, as this is the Adobe Las Flores where General Fremont signed the treaty with the Spanish Grandees many years ago. Mrs. Neal has turned it into a garden spot famed throughout all California. The beautiful old cactus garden in the front under the Pepper trees is a lovely sight and the inner patio with its fountain and cactus covered walls is truly a picture long to remember. In the rear of the house there are several lathouses full of Epiphyllum hybrids that Mrs. Neal has had for over 20 years. These plants were sent to her from Germany and it is a joy to see such large and healthy "oldsters" covered with bloom. After leaving Neals we turned north to Pasadena and had a picnic lunch under the trees in the yard of Mr. James McNary. Everyone was glad of a rest by this time and a gay social hour was enjoyed. After lunch we enjoyed Mr. McNary's fine display of many plants in full bloom, many splendid specimens of rare sorts, including a fine "Hitler." There was one more garden on our list before we

closed the day. We were invited to see the display at the home of Mr. and Mrs. Horning in Altadena, where truly a sight met our eyes, as the plants in full bloom hung from the trees on all sides of the hillside garden. Such bursts of color I have seldom seen. These superbly grown plants prove their fondness for lots of room and air, as they were free of pests and clean of all disease. Mr. Horning can indeed give us all pointers on growing "Epis." As the Tour disbanded we had time to visit the Beahm Gardens and Coolidge Rare Plant Gardens. Mrs. Beahm's newer varieties were in bloom for our big occasion. "Harmony" is most outstanding; a lovely one is "Fluffy Ruffles," and is very full as the name implies; lovely white "Shasta" was the queen of the day. At Coolidge's we saw some fine new seedlings they have developed in the past few years. The cross of "Sun Goddess" and "Argus" are very lovely. "Jubilo" was a huge golden monster. Also the dainty new "Flem-

ingo" with colors hard to define. The "Jeweled Corridor" was at its best and we all were happy to see the increased interest in our favorite flowers, the hybrid *Epiphyllum*."

Four nicer and more outstanding Gardens could not have been selected.

From the Cactus Digest, Lad Cutak, Editor, of the Henry Shaw Cactus Society. Mrs. Anna M. Frank, writes:

"Today I was down town at the department store where our Society had a beautiful display of cacti and succulents in connection with a three day Flower Arrangement Course and Judging School given by the Federated Garden Clubs of Missouri. Everyone present was surprised to see what really can be done with cacti and succulents. This display was arranged by Mrs. Corliss Williams, Carl Blandford and Mrs. Walter Fruehauf. Good work? Is was indeed very lovely."

VALUABLE REPRINT—Starting with the July issue we will publish two plates each month from "Bluhende Kakteen." These rare volumes contain many illustrations of cacti that are extremely valuable as reference material. The three volumes sell for \$300 as used copies which is an indication of their rarity.



FIG. 57. Ladislaus Cutak meets a rattlesnake at Cottonwood Springs in the Mohave Desert. It was a close call that almost made the "Spirit of St. Louis" a reality.

STANDARD FORM FOR DESCRIPTIONS

A year ago your editor prepared an illustrated descriptive blank for describing Epiphyllum hybrids. The idea was to check off the sketches that corresponded with the plant. Spaces were provided for dates, measurements, and colors. The one objection to this method was the size of the sheet, which was 9x12 inches.

The Research Committee of the Epiphyllum Society worked out a 4x6 inch file card. These may be more practical since they are easily arranged alphabetically in a drawer or case for that purpose. An instruction sheet should accompany this card system so that all terms will be clearly defined. Certain shapes are indicated by number, as in the branch forms and the shapes of the petals and fruit. Colors should be indicated from a recognized standard so that each set of cards will not have a self-coined system of color names. Test out this card according to the following instructions and report your suggestions to the Cactus and Succulent Journal.

PLANT

The *plant name* should be fully written out and not abbreviated and should be filed under its first name (Example: "June Kelly" should be filed under "J" and not "K." The same applies to the words "Doctor," "Miss," etc.). Mademoiselle, Monsieur, Professor, Doctor, Madame, etc., should be spelled out (not abbreviated: Mlle., M., Prof., Dr., and Mme., respectively). Mr. and Mrs. should not be used. "Miss" is commonly used. German words containing the umlaut should add the letter "e" (Example:

FIG. 58. The 9x12 illustrated description form.

PLANT		Name		Originator		Date		Number	
Habit		Growing Conditions							
BRANCH	Length	Width	Shape	Color	Margins	Areoles	Appendages		
FLOWER	Date	Nocturnal-Diurnal	Duration	Fragrance			Texture		
	Length	Width	Shape						
OVARY	Color	Length	Ridged	Scales	Appendages				
TUBE	Color	Length	Shape	Ridged	Scales	Appendages			
OUTER PETALS	Arrangement	Number	Length	Width	Shape	Color			
INNER PETALS		Number	Length	Width	Shape	Margins	Tips		
	Color								
STAMENS	Length	Habit	Color	ANTHERS		Size	Color		
STYLE	Length	Habit	Color	STIGMAS	Number	Length	Habit	Color	
FRUIT	Date	Size	Shape	Color	Outside	Inside	Appendages	SEEDS	
								Size	
								Color	

FIG. 59. The proposed 4x5 card form for descriptions of hybrid Epiphyllums. This card will be printed in gray ink so that pen and ink will be dominant.

"Doctor von Pöhlnitz" should be written "Doctor von Poellnitz," ö becomes oe, ä becomes ae, and ü becomes ue).

The *originator* (not the distributor) should be shown when known, as well as the parentage of the cross with the *date*. Many growers give plants numbers, as they are acquired, and the source of the plant.

The *habit* of the plant may be indicated as being: 1-small, 2-thick, 3-tall, 4-branched, 4-basket type and may be vigorous or weak. The *growing conditions* may be in clay pots or cans, in a lath-house, open porch, or a sun window; the plant might be grafted.

BRANCH

The average *length* and *width* of the branches should be indicated in inches. The *shape* of the branches in cross section are flat, round, triangular or four-angled. *Margins* may be indicated by numbers 1 to 7 as shown in the "Epiphyllum Handbook" page 11.

The *color* may be dark or light green marked with red; they may be dull, glossy, or covered with bloom. The *areole appendages* may include scales, bristles, spines, felt cushions, or with air roots.

FLOWER

Most of the hybrids open in the evening and last one or more days. The *date* of flowering and the lasting quality (*duration*) of a flower should be indicated. The *fragrance* is difficult to describe and varies with the acuteness of the person making the description. The *texture* of the flower may be dull, or with a sheen; the flower may be firm or delicate. The *length* is taken from where the plant joins the branch to the extremity of the flower without opening out the petals; the *width* is taken across the opening to the extremity of the inner or outer petals—whichever opens the widest. The general *shape* is that of the side view of the inner petals and may be: 1-wide or flat, 2-bell-shaped, 3-funnelform, 4-cup-shaped, or 6-irregular.

Ovary and Tube

The *color* and *length* of the ovary (undeveloped fruit) should be given and whether it is slender or thick, *ridged* or smooth, many or few *scales*, and whether the scales have hair or bristles (*appendages*). The tube *color*, *length*, and *shape* are important and whether it is *ridged* or round and the number and length of the *scales* with their color and *appendages*.

Outer Petals

The *arrangement* of the outer petals are important in describing the shape of the flower; they may be: 1-appressed, 2-flaring, 3-wide opening, 4-recurving, 5-irregular, 6-combination of arrangements. The *shape* of the outer petals are: 1-narrow, 2-oblongate, 3-obovate, 4-spatulate, or 5-elliptic (see Epiphyllum Handbook page 36). The *number* and *color* should be indicated, as well as the *length* and *width*.

Inner Petals

The inner petals are the most important part of the flower and their color dominates the description. Show the *number*, *length*, and *width* and their *shape* (same way as for the inner petals, above). The *arrangement* of the inner petals may be: 1-wheel-shaped rather widely separated, 2-overlapping (15-20), 3-double (25-35), or 4-single and loosely arranged. The *number* of the petals helps to determine into which group they fall. The *margins* may be smooth, finely notched, or wavy and crepe-like. The *tips* may be: 1-acute, 2-pointed, 3-obtuse, 4-cuspidate, or 5-rounded (see Epiphyllum Handbook page 27); they may be cupped upward or downward. The *color* and markings are most important and should indicate the dominant color, mid-stripe, center, edges, base, throat, or any other variations. Sketches on the back of the card will

help to recall the markings.

Stamens and Pistil

The *length* and *color* of the stamens and anthers should be indicated and whether the *habit* of the stamens is erect, cascading, or both. The pistil, which includes the style and stigmas, should show the *length* of each and their *colors*; the *habit* of the style may be erect or drooping, and the habit of the stigmas may be spreading or clasping (not expanding).

FRUIT

The *date* of the ripened fruit, the *size*, whether smooth or ridged, and the outside and inside *color* should all be indicated; the *appendages* are important and the scales, bristles, or spines should be mentioned. The *color* and *size* of the seeds complete the description.

Some growers like to classify their list by flower color. By using colored tabs attached to the top edge of the cards, one can select their pink, white, magenta, or red flower descriptions. Others may prefer to separate their cards into color groups and arrange them in alphabetical order under each color.

ORCHID CACTI OR CACTUS ORCHIDS

The popular name that has been applied to Epiphyllums that have been crossed with other cacti is "Orchid Cacti." This means that they are still cacti but they resemble orchids. To say that they are "cactus orchids" is wrong because they are NOT orchids.

FROM ENGLAND

Cacti are quite easy and very interesting plants to grow if a few simple rules are attended to here in England:

The ideal place for developing a collection is a glasshouse with a southerly aspect, or failing this, a small collection can be grown quite nicely in a living room window which receives a fair amount of mid-day sun.

Water should be given regularly during the spring and summer but very little is needed during the cold and winter months. An occasional spray over the plants during the evening on warm days will help to keep them clean and fresh looking.

They also like fresh air, so window ventilation should be given, weather permitting. Keep free from frost.

If the foregoing points are carefully attended to, you will keep your plants in good health and possess a very fascinating hobby.

Special Succulents

Succulents require similar treatment but should be shaded a little from direct sunlight and can be watered more frequently than cacti.

ALFRED WOOD.

SUCCULENT PLANTS OF NEW AND OLD WORLD DESERTS

This 64 page booklet written by E. J. Alexander of the New York Botanical Garden contains 102 excellent pictures of cacti and the other succulents that you should have in your collection. The descriptions are very readable and every amateur should have this book. Order now while available, 55 cents postpaid.

Lyman Benson, *A Revision of Some Arizona Cactaceae*, reprinted from Proceedings of the California Academy of Sciences, 1944. 75c postpaid.

BOX 101, PASADENA, CALIF.



SPINE CHATS

LADISLAV CUTAK



The writer pulled out of St. Louis at midnight, April 2, on the first lap of his journey which eventually was to bring him to Los Angeles. From there excursions were to be made in all directions, permitting him to see most of Southern California with its picturesque deserts, numerous cactus nurseries and magnificent gardens, both private and public. The original plan called for four weeks of absence from the Garden but because of transportation difficulties an additional week became available in the Golden State. Had I resorted to the railroad for the return journey I might have been stranded for at least another month, but thanks to the American Airlines I was successful in securing passage on one of their planes. What would have taken three days and nights was accomplished in exactly 15½ hours.

The train ride was uneventful most of the way and scientifically monotonous, especially through Kansas. In the vicinity of Topeka and beyond small trees of *Cercis canadensis* imparted vivid splotches of color to the hillsides. Their small red purple blossoms, adorning the naked branches, have always fascinated me. About a half-hour's ride to Liberal, a number of Kansas narrow-leaved Yuccas made their appearance in a sagebrush desert. Tumble weeds were piled in masses along the fences and in gulleys. Miniature dust storms sweeping across the prairie, gave hints that rainfall had been inadequate. Nearing El Paso, Texas, the exquisite-flowered Sand Verbena formed carpets of rose pink on the white desert floor.

Mr. Robert Peebles, director of the U. S. Field Station in Sacaton, was awaiting me at the depot in Coolidge, Arizona, where I was scheduled to alight. Ten years had elapsed since my last visit to the Saguaro State and I had determined to spend one week there on this trip. I wanted to relive those first happy days at Boyce Thompson Southwestern Arboretum, track through groves of magnificent Giant Cacti, and renew acquaintances with Bob Peebles and Mrs. Gertrude Webster. The Arizona interlude was all too brief but every moment was full of excitement. A delightful morning was spent at the Arboretum where Fred Gibson holds sway. In his company we inspected the grounds and saw clumps of hedgehog cacti loaded with scarlet or purple bloom. Along the trails, shrubs, trees and vines from various regions of the world were resplendent with gorgeous blossoms. With Peebles as guide, a 240-mile circle tour of the famous Apache Trail was completed, offering some of the most awe-inspiring scenery in the State. The drive from Superior to Miami thrilled me even as it did ten years ago and will always remain one of the most beautiful drives in the United States.

Mrs. Webster, ensconced in a mission-style adobe house at the base of Camelback Mountain outside of Phoenix, was my next host. She possesses one of the finest private cactus gardens in this country and her plants have shown remarkable growth under her care. Due to her untiring efforts she was mostly responsible for developing the Desert Botanical Garden in Papago Park, destined to become one of the outstanding xerophytic gardens in America. I hated to leave my Arizona friends but important work awaited me in California and so I had to draw myself away from them.

What a grand reception the Cactus Society gave me in Los Angeles! On the night of April 12 a dinner

was tendered in my honor, attended by many dignitaries of the Southern California cactus world. It was my first chance to renew old acquaintances and to make new friends. Next day was enjoyably spent in Corona with Mr. and Mrs. Howard Gates. The affable Gates is one of the best known cactus growers in California. He conducts his business strictly wholesale, and has under cultivation more than a million plants at all times. The following two days were given over to Elsa and Frank Mark, who made possible my visit to Gil Tegelberg's establishment in Inglewood. While guest in the Mark home I had an opportunity to browse through the many valuable books Frank offers for sale. On the 14th it was my pleasure to deliver an extemporaneous talk to the members of the Southern California Cactus Exchange at Exposition Park.

Dr. and Mrs. Frank Cariss treated me to a night at Earl Carroll's theater restaurant and frankly I had the time of my life. Pinky Lee, the star comedian of the show, had me in stitches with his wisecracks and silly antics. I even got the nerve to dance on the Earl Carroll stage. Here is one cactus enthusiast that likes to mix fun with his more serious work.

Two full days were spent in the Huntington Botanical Gardens at San Marino where many courtesies were extended me and for which I am very grateful. Here is grown the most notable collection of cacti and succulents out of doors, truly an earthly cactus paradise that has no comparison anywhere. Dave Barry, at whose home I made my headquarters during most of my stay, drove me to Santa Barbara for a most pleasant visit with venerable Mr. Orpet, dean of California horticulturists, with Mrs. E. Carpenter who grows Bromeliads like nobody else does, and with Mrs. Ina Campbell, grand old lady who loves her cacti sincerely. Easter day found me at the home of Bill Marshall, where an appointment with Dot and Erv Strong was kept. Early next morning Bill Marshall, Scott Haselton, Gil Tegelberg and I left for a three-day desert trip encompassing some 500 miles. It was one of the most enjoyable trips I had ever undertaken and was my introduction to the California wastelands. There I had the rendezvous with the stuffed snake beside my sleeping form (illustration appears elsewhere in this issue). My, does it send cold shivers down your spine? Got to be careful with what kind of bunch you go out with, but I fooled them this time.

Bob Kelly took me deep sea fishing. I never held a fishpole in my life but came near catching two barracudas, except that both got away because of my inexperience. The last week of my stay was spent in La Canada as guest of Dr. and Mrs. Cariss, who saw to it that not one dull moment marred my visit. We drove to San Diego over the weekend, botanized in the extreme southwestern corner of the State, spent a delightful day with Mrs. Bakkers at the Knickerbocker Nursery, enjoyed the hospitality of Mrs. Betty Harris and Mr. Walmsley. We made a special trip to Devil's Garden in the Borego Desert, located Marshal South's family, collected sedums in the San Bernardino, and made the voyage to Catalina Island. This will give you a general idea how busy I was kept. I'll have some interesting stories to relate for I've seen a lot of fascinating things, met a lot of people, saw many intriguing collections and gathered much valuable information.

SPECIAL THIS MONTH

Foreign Cactus Seedlings—all different. Eight for \$1.00, 15 for \$1.50, 32 for \$3.00. All named. This is the time to transplant them. Also just received the following that I have been out of for a long time: *Cochemia setispina*, *Ferocactus coloratus*, *F. gracilis*, *Pachycereus Pringlei* at prices and terms in Catalog No. 7.

Californians must pay sales tax
KNICKERBOCKER NURSERY
 6065 Broadway, San Diego 2, Calif.

RARE CACTI AND NOVELTIES

Send 5 cents in stamps for Price List
FRITZ SCHWARZ

Apartado 347, San Luis Potosi, S.L.P., Mexico

RARE EPIPHYLLUMS AVAILABLE

Mr. T. MacDougall has recently returned from a collecting trip in Mexico and has made available to Society Members the following rare cuttings:

Epiphyllum Ackermannii (white flowered).
Epiphyllum Ackermannii (red flowered).
Lobelia MacDougallii (see JOURNAL, Dec., 1944).
Epiphyllum "crenatum" variety.

One each of the above \$5.00 postpaid
 (No foreign orders)

At least 6-inch unrooted cuttings. No replacements.
 Please make check payable to Mr. T. MacDougall.
 Address Cactus Journal, Box 101, Pasadena, Calif.

DISH GARDEN COLLECTION—consists of 10 all different, blooming size cacti. Labelled for \$1.00 Postpaid; 50 for \$4.00. **SPECIMEN CACTUS COLLECTION**—composed of our best varieties for display. 10 all different and labelled for \$3.00 postpaid. Send for Tropical Fish Price List.

GULFSTREAM FISH FARM

P. O. Box 1893, Riverside Station, Miami 35, Florida

MICHAEL DONNELLY CACTUS GARDENS

Rare cacti and succulents. Featuring the Don-Rita Brand. By appointment only.

334 Lowell Street—Daly City, California

MEXICAN CACTI

FROM DESERTS AND MOUNTAINS OF MEXICO

Ask for lists or send money
 for our famous collections:

50 different plants (incl. 1 crest) US—\$13.00

100 different plants (incl. 1 crest) US—\$25.00

Shipment free U. S.; plants half your and half our choice.

SPECIAL OFFER

25 specimens: U.S.—\$25.00 shipment free U. S.

Please apply for import permit at the U. S. Department of Agriculture, Washington, D.C., stating number and kind of plants desired and send respective official mailing tag with your order. No charge.

There always is a great assortment of show-plants, crests, clusters, succulents and other rare plants. Please ask for special offers!

"LA QUINTA"

Owner Fernando Schmoll
 Cadereyta de Montes, Queretaro, Mexico

COMMERCIAL DEALERS

QUALITY HILL CACTUS HOME

CACTUS AND SUCCULENTS—RETAIL ONLY

559 Evanston Ave. Kansas City, Mo.

VENTURA EPIPHYLLUM GARDENS

EPIPHYLLUMS

153 McFarlane Drive Ventura, Calif.

ALBERT AROZENA NURSERY

WHOLESALE GROWERS CACTI AND SUCCULENTS

1518 E. Rosecrans Compton, Calif.

CACTUS PETE

CACTI, SUCCULENTS, AND EPIPHYLLUMS

5440 Valley Blvd. Los Angeles, Calif.

COOVER COLLECTIONS

CACTI, SUCCULENTS, CRYPTANTHUS, EPIPHYLLUMS

2018 S. Summerlin Orlando, Florida

SWANSON CACTUS GARDENS

CACTI AND SUCCULENTS

1201 Gardena Blvd. Gardena, Calif.

DE WAYNE CACTUS GARDENS

CACTI AND SUCCULENTS—WHOLESALE AND RETAIL

846 Geneva Ave. San Francisco 12, Calif.

COOLIDGE RARE PLANT GARDENS

"THE JEWELLED CORRIDOR" OF EPIPHYLLUMS.

RETAIL. NO MAIL-ORDERS.

889 N. Foothill Blvd. Pasadena, Calif.

PIRTLES CACTUS GARDEN

CACTI, SUCCULENTS AND SEED—WHOLESALE, RETAIL
 Route 1. Edinburg, Texas

W. T. NEALE & CO., LTD.

CACTI, SUCCULENTS, AND SEEDS FOR THE COLLECTOR
 RETAIL ONLY.

Franklin Road Worthing-England

BEAHEM GARDENS

EPIPHYLLUMS—WHOLESALE AND RETAIL

2686 Paloma St. Pasadena 8, Calif.

EPIPHYLLUM HANDBOOK by Scott E. Haselton (1946). This first book on Epiphyllums and their hybrids gives their history and parentage as well as the flower parts and how to make descriptions. Complete cultural and propagation information. Explains hybridizing with pictures of all the plants used. Contains 250 pages with 170 photographs and 11 color plates. Price \$3.50, postage U.S.A. 10c, foreign 50c. (Postage and sales tax in California 20c). Abbey Garden Press, Box 101, Pasadena, California.

THE MAMMILLARIA HANDBOOK—Dr. R. T. Craig. \$7.50. Postage in U.S.A. 15c, foreign 50c.

Order now. Check your plants. This new monograph on Mammillarias contains 400 pages bound in heavy buckram and the same size as the smaller edition of the Britton and Rose Reprint. There are 236 species fully described and illustrated with 300 photographs.

PRONOUNCING GLOSSARY—Marshall & Woods. Collectors and beginners have demanded information so that they may be able to pronounce these "terrible" cactus names. 120 valuable pages. Cloth bound \$3.15. This Glossary includes all terms used in the description of cacti with hundreds of suitable illustrations.

Van Laren's "Succulents"—original edition in Dutch \$25.00

The 10 volume set of *Flora Capensis* is now ready for delivery for \$100.

MESEMBRYANTHEMA by Brown, Tischer, Karsten. \$8.75.

ABBEE GARDEN PRESS

Box 101 — Pasadena 16 — California

